

ABSTRACT

A distributed router able to reduce occurrence of ping-pong of data and information packets within the architecture of the distributed router constructed with a main processor, a plurality of line connection units and a switching unit, is disclosed. The main processor manages a routing table, updates the routing table, and broadcasts the changes in routing information that are received. The switching unit switches packets either to the main processor or to the respective line connection units. A plurality of forwarding tables are positioned in different corresponding ones of the plurality of line connection units, to copy, store and manage a part of the routing table. A plurality of forwarding processors are positioned in different corresponding ones of the plurality of line connection units, to transmit each packet to an output port, to determine whether the output port of a packet received from the switching unit is connected to either an external router or the switching unit, and to transmit each packet to the external router when the output port is connected to the external router, and discard any packet when the output port is connected to the switching unit.